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09/960,504	09/24/2001	Jung-kwon Heo	1293.1187	7211
49455 7590 01/16/2007 STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER REAGAN, JAMES A	
			ART UNIT 3621	PAPER NUMBER
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**GROUP 3600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/960,504  
Filing Date: September 24, 2001  
Appellant(s): HEO, JUNG-KWON

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James G. McEwan  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 30 October 2006 appealing from the Office action mailed 08  
March 2006.

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**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

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**(9) Grounds of Rejection**

**Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5,6,34-42 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature, which constitute "descriptive material." Abstract ideas, *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs, which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." *The New IEEE Standard Dictionary of Electrical and Electronics Terms* 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable

medium that increases computer efficiency held statutory) and Warner, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warner, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law. (See MPEP 2106) These claims are mere arrangements of data, and are thus non-statutory.

## **(10) Response to Argument**

### **ISSUE A**

On page 6 of the brief, Appellant states that a prima facie case has not been established to properly reject claims 5, 6, and 34-42 under 35 USC § 101. Through pages 7 and 8 of the brief the Appellant cites numerous court decisions and the MPEP, each citation accented by underline. Appellant continues to assert that the rejections lacks sufficient analysis to sustain a rejection under 35 USC § 101, and concludes the allegation by announcing that the examiner does not refer to specific features of the limitations claim found within remaining claims 6 and 34-42. Although the Appellant has cited MPEP section 2106 of the MPEP, the Examiner is concerned that the Appellant has ignored section **2106.01 [R-5] Computer-Related Nonstatutory Subject**

Matter, which is most appropriate to the rejection at hand. Here, the MPEP clearly states the difference between "functional descriptive material" or nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs, which impart functionality when employed as a computer component. Obviously, this is not the case with claims 5 and 6 as written. Claims 5 and 6 recite only a recordable medium, not a computer-readable medium as dictated by the MPEP. With regard to claims 34-42, a proper review would conclude that each of the limitations does not meet the IEEE definition of data structure and is not functional descriptive material. The claims recite merely a collection of data and intended use or descriptions of what the data would mean to an apparatus/method, not relationships of data to support data processing functions.

#### ISSUE B

Appellant states *Consistent with this understanding of patentable subject matter, claim 5 of the instant application recites "a content data structure stored on a recordable medium." As such, claim 5 does not claim a data structure in the abstract, but instead a data structure within a stored medium.* Appellant then recites Lowry; data structures are specific electrical or magnetic structural elements, etc. Claims 5 and 6 of the instant application claim no such structure, only a recordable medium. There is no computer, no electrical or magnetic structure, and no data stored on a computer-readable medium. Contrary to the Appellants contention that claims 5 and 6 recite stored functional descriptive material, these claims do not show data structure storing information defining interrelationships between the stored data and an apparatus, which permit the apparatus to perform defined functions. The claims recite merely a collection of data and intended use or descriptions of what the data would mean to an apparatus/method, not relationships of data to support data processing functions.

**ISSUE C**

Appellant, on pages 10 and 11 of the brief states that *claims 34-42 also define a patentable data structure having a patentable interrelationship beyond mere compilations of data.* However, claims 34-42 contain limitations that merely describe data that is stored on a computer readable medium and which perform no function. Data merely residing in a memory is non-functional when it does not impart any serviceable functionality to the apparatus. As written, the claims do not recite a *positive* step such as, for example, identifying information that indicates whether content data is original. The claims recite merely a collection of data and intended use or descriptions of what the data would mean to an apparatus/method, not relationships of data to support data processing functions.

**(11) Related Proceeding(s) Appendix**

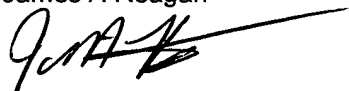
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

James A Reagan



JAMES A. REAGAN  
PRIMARY EXAMINER

Conferees:

Vincent Millin



Kambiz Abdi

